FC-1-01T: Fundamentals of Computer

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Course: Fundamentals of Computer	
Course Code: FC-1-01T	
Course Outcomes (COs)	
After the completion of this course, the students will be able to:	
CO1	Learn the basic knowledge of computer hardware and software
CO2	Get basic knowledge of number system
CO3	Gain knowledge of computer languages such as machine language, assembly language, high level language, 4GL.
CO4	Learn hands on experience with operating systems
CO5	Learn the computer networks, Information Technology and Society

Detailed Contents:

Module No.	Module Name	Module Contents
Unit 1	Introduction of Computer	Characteristics of the Computer, Block diagram of a Computer, Classification and Generations of Computer, *Input Devices:* Keyboard, Mouse, Trackball, Space ball, Joystick, Light pen, Touch screen, Digitizer, Data Glove, Scanner, Speech Recognition Devices, Optical Recognition Devices: OMR, OBR, OCR, MICR, Video Cameras, *Output Devices:* Monitors, Printers and its types, Plotters and its types, Speakers, Multimedia Projector.
Module II	Number System	Concept of Bit and Byte, Number System: Binary, Octal, Decimal and Hexadecimal System, Conversion from one system to the other. Binary Arithmetic: Addition, subtraction and multiplication. 1's compliment, 2's compliment, Subtraction using 1's compliment and 2's compliment.
Module III	Computer Languages	Machine language, assembly language, high level language, 4GL. *Language Translators:* Compiler, Interpreter, and Assembler. *Software:* Types of Software: System Software, Application Software, and Firmware. *Memories:* Memory Hierarchy, Memory Types: Magnetic core, RAM, ROM, Secondary, Cache, Overview

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		of storage devices: floppy disk, hard disk, compact disk, tape.
Module IV	**Operating System**	Functions of Operating System, Types of Operating System, Turning on a computer, desktop, taskbar, start menu, booting up, Desktop, Shortcut, Icons, Recycle Bin, Start Menu, My Computer, Computer's Devices and Drives, Storage, Removable Storage, CD/DVD Drive, floppy drive, and USB flash drive, Hard drive, Control Panel, The Window, Parts of Window, File Explorer, Files, Folders, Directories, Command, Menus, Keyboard, Function Keys, Normal Keys, Special keys, Direction keys, Numeric Keypad, Numeric Keys, Mouse: Left button, Right Button, Windows Accessories, Sharing Information between Programs. Virus, Antivirus, Peripherals can use with your computer.
Module V	**Computer Networks**	Components of data communication, modes of communication, standards and organizations, Network Classification, Network Topologies; Network Types, Transmission media, network protocol; layered network architecture. Basic of Computer networks: LAN, MAN, WAN.
Module VI	**Information Technology and Society**	Applications of Information Technology in Business and Industry, Railway, Airline, Entertainment, Banking, Insurance, Inventory Control, Hotel Management, Education and Training, Mobile Phones, Information Kiosks, Weather Forecasting, Scientific Application.

Books

1. Pradeep K., Sinha, "Computer Fundamentals: Concepts, Systems & Applications", BPB
2. Rajaraman V, "Fundamentals of Computers", PHI
3. RS Salaria, "Computer Fundamentals", Kanna Publication, 1st Ed., 2017
4. E Balagurusamy, "Fundamentals of Computers", Mc Graw Hill, 2012
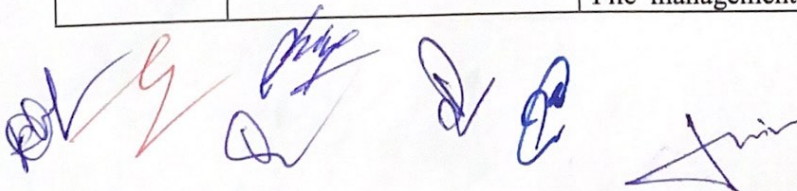5. Glenn Brookshear, "Computer Science: An Overview", Pearson, 2012

DOAEG-1-02T: Office Equipment & Secretarial Tasks

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Course: Office Equipment & Secretarial Tasks	
Course Code: DOAEG-1-02T	
Course Outcomes (COs)	
After the completion of this course, the students will be able to:	
CO1	Demonstrate proficiency in operating common office equipment such as photocopiers, scanners, fax machines, and printers.
CO2	Understand the working of computer input and output devices.
CO3	Learn best practices for file management, both in physical and digital formats.
CO4	Understand and adhere to professional and ethical standards in the workplace.
CO5	Develop effective customer service skills in dealing with clients, visitors, and colleagues.

Detailed Contents:

Module	Module Name	Module Contents
Module I	**Office Machines and Equipment**	Importance, objectives of office machines, Office Safety and Security: Meaning, importance of office Safety, safety hazards and steps to improve office safety, Security hazards and steps to improve office security
Module II	**Characteristics of Computers**	Hardware, Software, Machine Language, Assembly Language and Assembler, High Level Language and Compiler v/s Interpreter.
Module III	**Computer Input Devices**	Keyboard, Mouse, Joystick, Track Ball, Touch Screen, Light Pen, Digitizer, Scanners, Speech Recognition Devices Section B
Module IV	**Optical Recognition Devices and Output Devices**	OMR, OBR, OCR. Output Devices: Monitors, Impact Printers - Dot matrix, Character and Line printer, Non-Impact Printers – Desk Jet and Laser printing, Plotter.
Module V	**Office Work**	Measurement of Office Work, Importance, purpose, difficulty in measuring office work. Different ways of measurement, setting of work standards, benefits of work standards. File management, both in physical and digital

		formats, Maintaining an organized and efficient filing system. Approaches for effective customer service skills in dealing with clients, visitors, and colleagues. Professional and ethical standards in the workplace.
Module VI	**Techniques of setting standards and Office Manuals**	Techniques of setting standards, Office Manuals: Meaning, need, types of office manuals and steps in preparing of office manuals.

Books

1. Pradeep K., Sinha, "Computer Fundamentals: Concepts, Systems & Applications", BPB Publications
2. Rajaraman V, "Fundamentals of Computers", PHI
3. RS Salaria, "Computer Fundamentals", Khanna Book Publications, 1st Edition, 2017
4. Archana Kumar, "Computer Basics with Office Automation", Wiley, 2013
5. Angeline D Magdalene Delighta, "Exploring of Computer Fundamentals and Office Automation -I LAP", Lambert Academic Publishing
6. Dr. P. Rizwan Ahmed, "Office Automation-I", Margham Publications, 2016

OAT-1-03T: Office Automation Tools

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 4
Pass Percentage: 40%

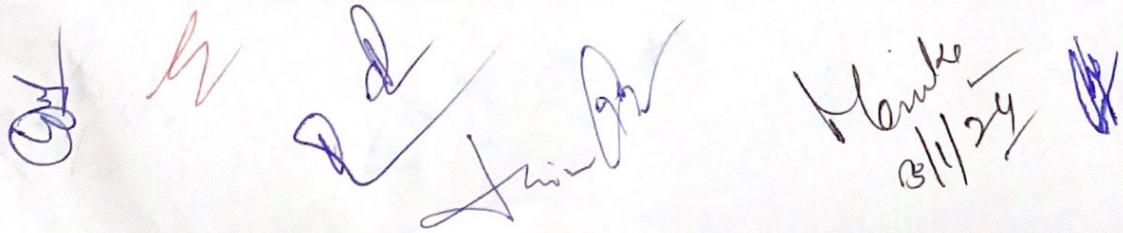| Course: Office Automation Tools	
Course Code: OAT-1-03T	
Course Outcomes (COs)	
After the completion of this course, the students will be able to:	
CO1	Demonstrate proficiency in using office suite applications such as Microsoft Office for Word Processing.
CO2	Demonstrate proficiency in using office suite applications such as Microsoft Office for Power Presentations.
CO3	Demonstrate proficiency in using office suite applications such as Microsoft Office for Spread Sheets.
CO4	Understand and utilize electronic signature tools such as DocuSign or Adobe Sign for digitally signing documents.
CO5	Familiarity with Video conferencing software for online meetings and webinars.

Detailed Contents:

Module	Module Name	Module Contents
Module 1	**Microsoft Office for Word Processing**	Introduction to Word Processing, Development of the Word Processor, Creating, opening and closing documents, Working with multiple documents, Saving documents, Save an existing file under another name, Locating the components of the Writer window, Writer toolbars and ruler, Adjusting the application settings, Adding content to Writer Documents, Working with text, Editing Content, Formatting Documents, Text Formatting, Paragraph Formatting, Text alignment, Tabs and its types, Placing text at the tab position, Paragraph spacing, Working with lists, Paragraph borders and shading, Creating and Applying Styles, Adding tables, Adding data to a table, Deleting a table, Add and delete columns and rows, Modifying columns and rows, Inserting images, Modifying images, Resize an image and charts, Mail Merge, Preparing the documents, Creating the main document, Creating the data source, Document formatting.

Module II	Microsoft Office for Spread Sheets.	Introduction to Spreadsheets, Development of the spreadsheet, Design considerations for spreadsheet documents, Creating, opening, and closing spreadsheets, Working with multiple spreadsheets, Saving spreadsheets, Locating the components of the Calc window, Calc toolbars, Adjusting the application settings, Adding content to Calc spreadsheets, Working with cells, Selecting cells and cell ranges, Entering data in cells, Numerical data, Date format of data, Sorting data, Formatting appearance, Copying and Moving cells, Working with rows and columns, Formulas and Functions, Arithmetic formulas, Arithmetic operators, Functions, Cell ranges, Charts and graphs, Types of Charts, Creating charts from cell data, Modifying a chart, Preparing spreadsheets for output, Setting up a worksheet for printing, Printing worksheet
Module III	Microsoft Office for Power Presentations.	Introduction to Presentations, Design principles, Purpose of the Presentation, The Design Process, Graphics and illustrations, Working with Presentations, Window Layout, Opening an Existing Presentation Using the File Menu, Saving a Presentation, Saving a Presentation in Different Formats, Creating a New Presentation, Using Pre-defined Presentation Templates in Presentation, Creating a Presentation from Scratch, Slide Layouts, Adding, Copying and Deleting Slides, Creating and Applying Presentation Views, Creating a Master for Presentation, Adding a Graphic or Object, Adding Text to Slides, Enter Text into Placeholders, Title Placeholder, Text Placeholder, Adding Text in Outline View, Adding a Textbox to a Slide, Copy, Move and Delete Text and Text Boxes, Formatting Text, Work with Tables in Presentations , Inserting Charts, Different Chart Types, Identifying the Parts of a Chart, Inserting a Simple Chart, Importing Charts and Tables from a Spreadsheet, Working with Graphics, Graphical Object, Inserting Clip Art, Inserting an Image from File, Using the Art Gallery to Draw Objects, Move/Delete/Copy a Selection of Objects, Preparing your Presentation, Animation Effects

		on Text and Objects, Add Presenter Notes to Slide

Module IV	**Collaboration & Communication and Electronic Signature**	**Microsoft Teams:** Combines chat, video conferencing, file storage, and application integration for team collaboration.
		Zoom: Video conferencing software for online meetings and webinars.
		Electronic Signature:
		    DocuSign: Allows users to electronically sign documents, contracts, and agreements.
		    Adobe Sign: Part of the Adobe Document Cloud, offering electronic signature capabilities.

Module V	**Future Trends in Office Automation**	Emerging technologies and their impact on office automation
Module VI	**Security and Privacy**	• Importance of security in office automation • Best practices for securing office documents and communications

Books

1. Ramesh Bangia, "Learning Microsoft Office 2010", Khanna Publishers
2. Satish Jain, Shashi Singh, M. Geetha Iyer, "Bpb'S Computer Course Windows 10 With Ms Office 2016", BPB Publications
3. https://baou.edu.in/assets/pdf/BSCIT_103_slm.pdf
4. https://www.ebookbou.edu.bd/Books/Text/SST/DCSA/dcsa_1302/Unit-02.pdf
5. https://www.msuniv.ac.in/images/e-content/6.Computer%20%20Fundamentals%20and%20Office%20Automation.pdf

OAT-1-03T: Office Automation Tools Lab

Total Marks: 50
External Marks: 35
Internal Marks: 15
Credits: 2
Pass Percentage: 40%

Course: Office Automation Tools Lab
Course Code: OAT-1-03P
Course Outcomes (COs)   After the completion of this course, the students will be able to:

CO1	Create and format various types of documents using word processing software.
CO2	Apply styles, formatting, and templates to enhance document appearance.
CO3	Create, edit, and format spreadsheets for data management and analysis using tools like Microsoft Excel.
CO4	Develop effective presentation skills using presentation software (e.g., Microsoft PowerPoint).
CO5	Enhance communication skills through effective use of email, instant messaging, and other communication tools.

Detailed about Experimental Tasks:

Experimental Task No.	Experimental Description
T1	• Experimental work to create and format various types of documents using word processing software. • Experimental work to apply styles, formatting, and templates to enhance document appearance.
T2	• Experimental work to create, edit, and format spreadsheets for data management and analysis using Microsoft Excel. • Experimental work to perform basic and advanced functions like sorting, filtering, and creating charts.
T3	• Experimental work to develop effective presentation skills using presentation software (e.g., Microsoft PowerPoint). • Experimental work to design and deliver presentations with a focus on visual appeal and communication effectiveness.

T4	• Demonstrate proficiency to utilize collaboration tools within office suites for real-time editing and sharing of documents.
T5	• Demonstrate proficiency to use of email, instant messaging, and other communication tools.
T6	• Demonstrate proficiency to sign electronically on documents, contracts, and agreements.

BCS-2-01T: Basic Communication Skills

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Course: Basic Communication Skills	
Course Code: BCS-2-01T	
Course Outcomes (COs) After the completion of this course, the students will be able to:	
CO1	Gain competence in verbal and non-verbal communication
CO2	Increase comprehension levels
CO3	Use language for effective communication
CO4	Understand the processes of communication
CO5	Overcome barriers in communication

Detailed Contents:

Module	Module Name	Module Contents
Module I	Understanding Human Communication:	Constitutive Processes of Communication, Language as a tool of communication, Barriers to Effective communication, Strategies to Overcome the Barriers, Non-Verbal Communication, Importance of Non-Verbal Communication, Non-Verbal Communication and Cultural influences
Module II	Listening Comprehension	Difference between Hearing and Listening, Effective Listening Strategies, Listening in Conversational Interaction
Module III	Speaking Skills	Expressions in different Communicative Functions: Asking Questions; Making Requests and suggestions; Expressing Greetings, Apologies and Gratitude Job Interviews, Group Discussions, Presentation Skills
Module IV	Reading Comprehension	Introduction, Reading Process, Reading different kinds of Texts, Reading Methods- Using KWL for reading comprehension
Module V	Effective Written Communication	Constituents of Effective Writing, Coherence and Cohesion for effective writing
Module VI	Business Correspondence	Letter writing, Resume/CV, E mails for Communication, Writing Reports, Describing Tables and Charts, Meetings: Agenda and Minutes

Books

1. Koneru, Aruna. Professional Communication. Delhi: McGraw. 8th Ed, 2017.
2. Mahanand, Anand. English for Academic and Professional Skills. Delhi: McGraw, 2013.
3. Rani, D Sudha, TVS Reddy, D Ravi, and AS Jyotsna. A Workbook on English Grammar and Composition. Delhi: McGraw, 2012.
4. Rizvi, M. Ashraf. Effective Technical Communication. Delhi: McGraw, 2nd Ed. 2017

Examination Pattern:

Evaluation should be in Subjective style.

As this paper pertains to communication skills, it should not be evaluated on MCQ pattern.

MCQ pattern for this course is an inappropriate way of testing communication skills of the learner.

DOAEG-2-01T: Office Operations & Office Management

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Course: Office Operations & Office Management	
Course Code: DOAEG-2-01T	
Course Outcomes (COs)	
After the completion of this course, the students will be able to:	
CO1	Understand key concepts and issues of Office Operations & Office Management.
CO2	Identify components of office management roles and procedures and team dynamics.
CO3	Communicate finding using business software applications.
CO4	Identify the operational issues in the value addition processes in office management.
CO5	Understand the analytical skills and problem-solving tools to resolve the operational issues.

Detailed Contents:

Module	Module Name	Module Contents
Module I	Basics of Office Operations	Meaning of office, function of office, primary and administrative functions, importance of office, Relation of office with other departments of business Organization. Types of Office: Concept of paperless office, virtual office, back and front office, open and private office.
Module II	Office Management and Forms	Definition, Principles of Office Management, Elements of Office Management, Functions of Office Management, Duties and Functions of Office Manager, Functional Office Management, Administrative Office Management
Module III	Office Forms	Office Forms: Meaning and types of forms used in business organization, forms controls, form designing, principles of forms designing and specimens of forms used in office.
Module IV	Office Record Management	Meaning, importance of record keeping management, principles of record management and types of records kept in a business organization.
Module V	Office Operations	Office Operations: Introduction to MS Excel, Enter & Edit Data, Range of Cells, Entering and Copying the Formula, Cell References, Setting

		the Column Width, Cell Formatting and Fill Handle, Copying and Moving the Cell Content, Inserting Cells, Columns and Rows.
Module VI	Graphic Objects and Charts	About Graphic Objects and Charts, Data Series with Drawing Objects Database & Pivot Table – Refreshing a Pivot Table, Changing the Pivot Table layout, Copying/ Deleting the Pivot Table. Filtering Database Records - Auto Filter and Advanced Filter, Goal Seek.

Books

1. Jain S.P and Chabra T.N, Laxmiparasuram, "Office Management", Thirichanapalli.

2. V.S.P & P.S NarayanaRao, "Text Book of Office Management", Tata McGraw Hill Publishing.

3. Singh S.P & Singh B, "Office Management", S.P Gyan Publishing House, Delhi.

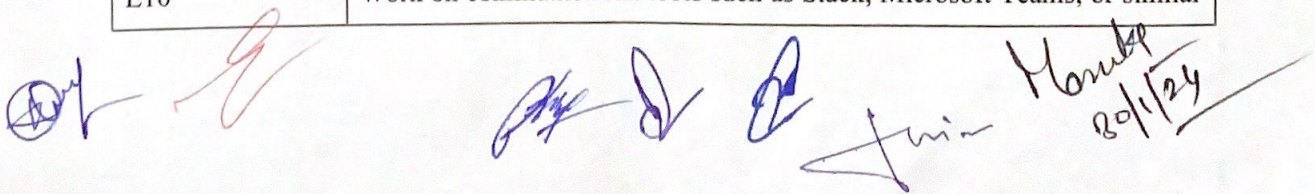4. T Ramaswamy, "Principles of Office Management", Himalaya Publication.

DOAEG-2-01P: Office Operations & Office Management Lab

Total Marks: 50
External Marks: 35
Internal Marks: 15
Credits: 2
Pass Percentage: 40%

Course: Office Operations & Office Management Lab
Course Code: DOAEG-2-01P
Course Outcomes (COs)
After the completion of this course, the students will be able to:

CO1	Explore the basics of office software applications such as Microsoft Office Suite (Word, Excel, PowerPoint).
CO2	Creating and formatting documents, spreadsheets, and presentations.
CO3	Develop a professional document incorporating various formatting styles.
CO4	Create a comprehensive file organization system for an office scenario.
CO5	Creating charts, graphs, and performing basic data analysis.

Detailed of Experiments:

Experiment No.	Name of Experiment
E1	Experiment work on the basics of office software applications such as Microsoft Office Suite (Word, Excel, PowerPoint).
E2	Hands-on exercises: Creating and formatting documents, spreadsheets, and presentations.
E3	Project: Develop a professional document incorporating various formatting styles.
E4	Hands-on exercises: Drafting professional emails, managing calendars, setting up meetings.
E5	Plan and schedule a mock office meeting, sending invitations and reminders.
E6	Hands-on exercises: Organizing files and folders, backing up data.
E7	Hands-on exercises: Creating charts, graphs, and performing basic data analysis.
E8	Develop a project plan for a hypothetical office project.
E9	Create a comprehensive file organization system for an office scenario.
E10	Work on communication tools such as Slack, Microsoft Teams, or similar

	platforms.

EG-2-02T: E-Governance

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Course: E-Governance
Course Code: EG-2-02T
Course Outcomes (COs)
After the completion of this course, the students will be able to:

CO1	Develop deep understanding about E-Governance and E-Government
CO2	Understand different E-Governance models and infrastructure development
CO3	Critically analyze E-Governance in Administration.
CO4	Participate in E- Governance activities.
CO5	Utilization of information technology to avail public services

Detailed Contents:

Module	Module Name	Module Contents
Module 1	Introduction to E-Government and E-Governance	Difference between E-Government and E-Governance; E-Government as Information System; Benefits of E-Government; E-Government Life Cycle; Online Service Delivery and Electronic Service Delivery; Evolution, Scope and Content of E-Governance; Present Global Trends of Growth in E-Governance
Module II	Models of E-Governance	Introduction; Model of Digital Governance: Broadcasting / Wider Dissemination Model, Critical Flow Model, Comparative Analysis Model, Mobilization and Lobbying Model, Interactive – Service Model / Government-to-Citizen-to-Government Model (G2C2G); Evolution in E-Governance and Maturity Models: Five Maturity Levels; Characteristics of Maturity Levels; Towards Good Governance through E-Governance Models
Module III	E-Government Infrastructure Development	Network Infrastructure; Computing Infrastructure; Data centers; E-Government Architecture; Interoperability Framework; Cloud Governance; E-readiness; Data System Infrastructure; Legal Infrastructural Preparedness; Institutional Infrastructural Preparedness; Human Infrastructural Preparedness; Technological Infrastructural Preparedness
Module IV	Security for e-Government	Challenges and Approach of E-government Security; Security Management Model; E-Government Security Architecture; Security Standards
Module V	Applications of Data	Introduction; National Data Warehouses: Census

	Warehousing and Data Mining in Government	Data, Prices of Essential Commodities; Other Areas for Data Warehousing and Data Mining: Agriculture, Rural Development, Health, Planning, Education, Commerce and Trade, Other Sectors
Module VI	Case Studies	E-Government Initiatives in India and Punjab state, Cyber Laws, Punjab Land Records, E-Sewa Portal of Punjab Govt.

Books

1. R.P. Sinha, "E- Governance in India: initiatives and issues", Concept Publishing Company, 2006
2. Christopher G.Reddick, Jones & Bartlett, "Public Administration and information Technology", Learning, 2012
3. Shirin Madon , "E-governance for Development: A Focus on India", Palgrave Macmillan , 2002.
4. Ashok Agarwal, "E-Governance: case studies", University Press India, 2007.
5. Kamalesh N. Agarwala, Murli D. Tiwari, "IT and E-Governance in India", Macmillan, 2002.
6. Subhash C, "E-Government: from vision to implementation: a practical guide with case studies".
7. C.S.R. Prabhu, "E-Governance: Concepts And Case Studies", PHI ,2011